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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,305	09/27/2006	Taro Suzuki	21581-00443-US	2352
30678 7590 07/07/2009 CONNOLLY BOVE LODGE & HUTZ LLP 1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20006				
EXAMINER				
WEBB, WALTER E				
ART UNIT		PAPER NUMBER		
1612				
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07/07/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/585,305

**Applicant(s)**

SUZUKI ET AL.

**Examiner**

WALTER E. WEBB

**Art Unit**

1612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 2/27/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Applicants' arguments, filed 4/16/2009, have been fully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

#### ***Claim Rejections - 35 USC § 102—New by Amendment***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-15 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (GB 2058820, published April 1981).

Johnson teaches a composition and method for controlling dust allergens by periodic coating of fabrics with a pressurized aqueous coating composition comprising water, an organic solvent, a **hydrophobic polymer** (claim 1) and a propellant (see Abstract). Suitable polymers contain monomers which can be further described as acid monomers, basic monomers, soft monomers, and hydrophobic monomers (see pg. 3, lines 30-35). A specific composition comprises a hydrophobic polymer, methyl methacrylate polymer of 22% and a hydrophilic polymer, acrylic acid (**claims 3-5, 10-15**

**and 15)** at 15% (see pg. 4, Table 1). The amount of hydrophilic polymer is about 68% of the hydrophobic polymer, which fall between the 40 to 1000% of **claim 7 and 20**.

An allergen-suppression fiber is processed, as per **claims 8, 9 and 22**, insofar as the composition is taught to be periodically coated onto various fabrics.

The reference teaches a water insoluble polymer of at least one aromatic hydroxyl compound as per **claim 21**, insofar as it teaches 2-vinylpyridine, and dimethylaminohexyl acrylate.

In regard to **claim 2**, since the polymers of Johnson satisfy the limitations of claim 3, they would be expected to inherently possess the same chemical and physical properties, such as a melting point of 40°C or higher.

***Claim Rejections - 35 USC § 103—New by Amendment***

1) Claims 1-6, 8-19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearl et al., (US 2002/0182184) in view of Johnson (supra).

Pearl et al teach compositions for the safe removal of indoor allergens. Their cleaning composition comprises a wetting agent, a neutralizing agent, a surfactant-encapsulating agent, at least one embrittling agent and water. The composition is applied to carpets, upholstery, drapes and other fabrics (**claims 8, 9 and 22**) (see Abstract). The composition dries and subsequently the allergens can be removed (see id). The embrittling agents include acrylic copolymers such as water-borne carboxylated acrylic copolymer, water-borne sodium acrylate copolymer, water-borne styrene acrylate copolymer, and these agents can be used either alone or in combination.

Concentration of these water-borne polymer is about 0% to about 10% of the composition (Page 3, Para 0033, lines 1-12). Since these polymers are the same polymers preferred by applicant (see and compare paragraph 0033 of the prior art with the instant specification at the last paragraph of page 7, for example), they would reasonably be expected to inherently possess the same chemical and physical properties, including having a melting point of 40 degrees C or greater as required by instant claim 2. (This reasoning is reinforced by the fact that the prior art polymers can be used in environments having elevated temperatures, e.g., laundries, as taught at the penultimate sentence of paragraph 0012 of the prior art).

Pearl et al. does not teach adding water insoluble polymers.

Johnson teaches the use of hydrophobic polymers and hydrophilic polymers for controlling dust allergens.

Generally, it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in prior art. See MPEP 2144.06. Thus, combining hydrophobic or water insoluble polymers with the hydrophilic polymers of Pearl et al. as claimed in the instant invention would have been prima facie obvious since they are both taught to be useful for controlling allergens.

Since Johnson also teaches the use of aromatic hydroxyl compounds, as per **claim 21**, it would have been obvious to use them in the composition of Pearl, insofar

as they are acrylic copolymers. The artisan would have been motivated to combine them based on the suitability for their intended use (see MPEP 2144.06).

2) Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearl et al. (supra) in view of Johnson (supra) as applied to claims 1-6, 8-19, 21 and 22 above.

The prior art is discussed above. Its teachings are not specific about the weight % of hydrophilic polymer with weight % of allergen suppressing component. Concentrations of their embrittling agents and surfactant-encapsulating agent, sodium lauryl sulfate are expressed as wt % in total composition as described above. Their water-borne hydrophilic polymer can in general be present in at least about 40 weight % compared to allergen suppressing component, however. See the general ranges disclosed at paragraphs 0025 and 0033, for example.

Established precedent holds, even a slight overlap in range establishes a prima facie case of obviousness. In re Peterson, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003). Here, the overlap in ranges is certainly specific enough to reasonably suggest the instantly claimed percentages, and accordingly it would have been obvious to have arrived at those percentages simply by following the general teachings of the reference.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter E. Webb whose telephone number is (571) 270-3287. The examiner can normally be reached on 8:00am-4:00pm Mon-Fri EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick F. Krass can be reached (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Walter E. Webb  
/Walter E Webb/  
Examiner, Art Unit 1612

/Frederick Krass/

Supervisory Patent Examiner, Art Unit 1612